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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,267	09/22/2003	Ola Winzell	0119-129	7760

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EXAMINER

KARIKARI, KWASI

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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07/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/666,267

Applicant(s)

WINZELL, OLA

Examiner

Kwasi Karikari

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-6, 8-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-6, 8-18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-6, 8-18 and 20-23 have been considered but are moot in view of the new ground(s) of rejection.
2. Claims 7, 19 and 24 have been canceled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6, 8-18 and 20-23 are rejected under U.S.C. 103(a) as being unpatentable over Tran et al., (U.S 20030156573 A1), (hereinafter Tran) in view of Gopalakrishnan et al., (U.S 20040085936 A1), (hereinafter Gopalakrishnan) and further in view of Gollamudi et al., (U.S 20030126536 A1), (hereinafter Gollamudi).

Regarding **claims 1, 8 and 21**, Tran discloses a method/ apparatus and program in a medium of determining whether to decode a packet comprising:

determining a channel quality indication during a period of time (see Par. [0016]);

receiving a packet during the period of time (see Par. [0030]);

determining whether to the decode the received packet based on the determined channel quality indication (= decoding operation is performed when channel quality estimates is of values greater as selected threshold, see Pars. [0016 and 0021]).

Tran, however, fails to disclose **“a transport format”** and **“identifying a field in a table”** corresponding to the determined channel quality indication and the transport format, wherein the field indicates whether to decode the received packet.

However Gopalakrishnan teaches **a transport format** (see Par. [0007]).

Furthermore, Gopalakrishnan mentions an adaptive modulation coding technology that enables a selection of a transport format the best suits a prevailing channel condition (see Par. 0008).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Gopalakrishnan with the system of Tran for the benefit of achieving a system that include Adaptive Modulation and Coding technologies to improve system capacity (see Gopalakrishnan; Par. [0007]).

The combination of Tran and Gopalakrishnan teaches **“the determined channel quality indication; the transport format”** and **“the decoding of the received packet** (see the above cited references); but fails specifically to mention **“identifying a field in a table”** that indicates whether to decode the received packet

Gollamudi teaches a rate adaptation; a technique that involves dynamically selecting different data rates (that are also associated with different modulation and/or channel coding schemes MCS) for packet of data to be transmitted based on the latest estimate of channel condition (see Par. 0004). Furthermore, Gollamudi mentions that an **MCS is typically selected from a lookup table of MCS levels associated with channel condition thresholds** (see Par. 0005-6); and the selection of current MCS level from a **table of MCS levels stored in a memory** of current MCS levels, wherein each of the MCS levels is correspond to a channel condition threshold (see Pars. 0016-17).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Gollamudi with the system of Tran and Gopalakrishnan for the benefit of achieving a system that may selects a weaker MCS level, in a good channel condition, to achieve a higher data rate; and selects a stronger MCS level to provide greater protection for data packet being transmitted in poor channel condition (see Gollamudi; Par. [0004]).

Regarding **claims 2, 9 and 22**, as recited in claims 1, 8 and 21, Tran further discloses that the method/apparatus and program in a medium, further comprising: transmitting a negative acknowledgment when it is determined not to decode the packet (see Pars. [0021 and 0037]).

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Regarding **claims 3 and 10**, as recited in claims 1 and 8, Tran discloses that the method/apparatus, further comprising:

determining a second channel quality indication during a second period of time (when channel conditions are good or poor, see Pars. 0016 and 0020);

receiving a second packet during the second period of time (see Par. [0021]);

determining whether to jointly decode the packet and the second packet based on the determined second channel quality indication (see Pars. [0021 and 0037]); but fails to disclose a second transport format.

However Gopalakrishnan teaches **a transport format** (see Par. [0007]).

Furthermore, Gopalakrishnan mentions an adaptive modulation coding technology that enables a selection of a transport format the best suits a prevailing channel condition (see Par. 0008).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Gopalakrishnan with the system of Tran and Gollamudi for the benefit of achieving a system that include Adaptive Modulation and Coding technologies to improve system capacity (see Gopalakrishnan; Par. [0007]).

Regarding **claim 4**, as recited in claim 3, Tran further discloses the method, wherein the determination of whether to jointly decode is also based on whether the second packet is a retransmission of the packet (see Pars. [0021 and 0040]).

Regarding **claim 5**, as recited in claim 1, Tran further discloses the method, wherein if it is determined to decode the received packet, the method further comprises:

decoding the packet (see Par. [0040]);

performing a packet integrity evaluation on the decoded packet; and transmitting an acknowledgment if the packet integrity evaluation is successful (packet is successful decode, see Par. [0040]) and

transmitting a negative acknowledgment if it is determined that the packet integrity evaluation fails (see Pars. [0040]).

Regarding **claims 6, 18 and 23** as recited in claims 1,8 and 21 Tran fails to disclose the method/apparatus/program in a medium, wherein the transport format comprises a particular coding format and a particular modulation.

However Gopalakrishnan teaches **a transport format** (see Par. [0007]).

Furthermore, Gopalakrishnan mentions an adaptive modulation coding technology that enables a selection of a transport format the best suits a prevailing channel condition (see Par. 0008).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Gopalakrishnan with the system of Tran and Gollamudi for the benefit of achieving a system that include Adaptive Modulation and Coding technologies to improve system capacity (see Gopalakrishnan; Par. [0007]).

Regarding **claim 11**, as recited in claim 10, Tran further discloses the apparatus, wherein the determination of whether to jointly decode is also based on whether the

second packet is a retransmission of the packet (see Pars. [0021 and 0040]).

Regarding **claim 12**, as recited in claim 8, Tran further discloses the apparatus, wherein the processor comprises a first processor which determines the channel quality indication, and a second processor which determines whether to decode the received packet (see Pars. [0021 and 0040]).

Regarding **claim 13**, as recited in claim 8, Tran further discloses the apparatus further comprising: a decoder which decodes the received packet when it is determined that the received packet should be decoded (see Pars. [0021 and 0040]).

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Regarding **claim 14**, as recited in claim 13, Tran further discloses that the apparatus, wherein the decoder is a Turbo decoder (see Fig. 1, item 54).

Regarding **claim 15**, as recited in claim 13, Tran further discloses that the apparatus, wherein the processor comprises the decoder (see Par. [0021]).

Regarding **claim 16**, as recited in claim 13, Tran further discloses that the apparatus, wherein the apparatus is a wireless radio transceiver (mobile station 12, includes apparatus 42, see Par. [0033]).

Regarding **claim 17**, as recited in claim 13, Tran further discloses that the apparatus, further comprising:

a packet integrity evaluator which evaluates the integrity of the decoded packet (see Par. [0040]), wherein the transmitter transmits an acknowledgment if the packet integrity evaluation is successful (see Par. [0040]); and the transmitter transmits a negative acknowledgment if it is determined that the packet integrity evaluation fails (see Par. [0040]).

Regarding **claim 20**, as recited in claim 8, the combination of Tran and Gollamudi fails to disclose the apparatus, wherein the apparatus operates according to High-Speed Downlink Packet Access (HSDPA).

However Gopalakrishnan teaches that the apparatus operates according to High-Speed Downlink Packet Access (HSDPA) (see Par. [0009]).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Gopalakrishnan with the system of Tran and Gollamudi for the benefit of achieving a system that include Adaptive Modulation and Coding technologies to improve system capacity (see Gopalakrishnan, Par. [0007]).

Conclusion

4. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is

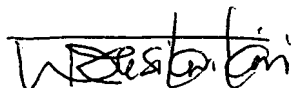
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not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is

571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Rafael Pérez-Gutiérrez* can be reached on 571-272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8566. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kwasi Karikari
Patent Examiner.

~~06/26/2007~~

06/24/2007

JEAN GELIN
PRIMARY EXAMINER

